CLAIMS

1. A flexible, integrally formed tie strip for forming a loop when passed through itself, comprising:

a plurality of identical cells formed in a strip, the cells forming generally loop-shaped enclosed apertures (10, 14) bounded by wall portions of the cells, each aperture allowing the passage of further cells through it, the cells being further provided with one or more latching members (11, 13, 26, 27, 31, 33) allowing passage of one cell through another in one direction but preventing passage of the cell in the reverse direction,

wherein the walls bounding the apertures can be folded to a saddle shape about transverse and longitudinal axes, so as to increase the width of the aperture without stretching the material of the walls, thereby facilitating the passage of a penetrant cell through the aperture of a further cell in use.

2. A flexible tie strip as claimed in claim 1 wherein the aperture is extended rearwardly by a notch in the rear wall portion bounding the aperture.

3. A flexible tie strip as claimed in claim 1 or 2, in which the rear wall portion of one aperture forms the front wall portion of a subsequent aperture.

4. A flexible tie strip as claimed in any preceding claim, wherein the front wall of each cell is generally semicircular and side walls are formed by short, roughly radial arms meeting the front wall.

5. A flexible tie strip as claimed in any preceding claim, wherein a cell in the saddle-shaped configuration during threading is further adapted to fold outwards to extend the width of the enclosed apertures to facilitate the passage of a penetrant cell.

6. A flexible tie strip as claimed in claim 4 or 5, wherein the change of shape of the penetrated cell is effected in use by the passage of the penetrant cell.

7. A flexible tie strip as claimed in any preceding claim, wherein in use during threading or attempted withdrawal the wall portions and/or the latching members of the penetrant cell preferentially curl about their longitudinal axes thereby altering the shape of the penetrant cell to facilitate passage of the cell through another.

8. A flexible tie strip as claimed in claim 7, wherein the bounding walls and/or latching members of the penetrant cell curl out of the horizontal plane of the strip causing the lateral width of the penetrant cell to decrease, in use.

9. A flexible tie strip as claimed in any preceding claim, wherein the cells are formed of elastic material, so that the cells are substantially restored to their original shape after one cell has passed though another.

10. A flexible tie strip as claimed in any of claims 7 to 9, wherein attempted withdrawal of a cell which has penetrated another invokes similar curling of the walls and/or latching members of the penetrant cell into a position that impeded withdrawal.

11. A flexible tie strip as claimed in claim 10, wherein on attempted withdrawal a complementary rotation of the wall of the penetrated cell further inhibits withdrawal of the penetrant cell, thereby improving latch integrity.

12. A flexible tie strip as claimed in any preceding claim, wherein tension in the strip causes rotation of the

latching members about an axis perpendicular to the horizontal plane, so that the latching members move outwards under longitudinal tension thereby increasing the lateral width of the penetrant cell portion to inhibit withdrawal.

13. A flexible tie strip as claimed in any preceding claim, wherein the material of the strip has a Shore hardness in the range of S80 to D60, a flexural modulus between 0.01GPa to 0.1GPa, a tear strength exceeding 100KN/m, and a tensile strength exceeding 25MPa.